In the claims:

Substitute the following claims for the claims currently on file.

1. (Currently amended) A system for triggering a plurality of test and measurement instruments substantially simultaneously, comprising:

a first test and measurement instrument having a first input for receiving a signal under test, an output for developing a trigger enable signal, and an input for receiving a combined trigger signal;

a second test and measurement instrument having a first input for receiving a signal under test, an output for developing a trigger enable signal, and an input for receiving a combined trigger signal; and

circuitry for logically combining said trigger enable signals of said first and second test and measurement instruments to generate said combined trigger signal;

wherein each of said test and measurement instruments is coupled to said circuitry for combining via a cable connecting a respective pair of transceivers, and said trigger enable signal and said combined trigger signal are conveyed in mutually opposite directions through said cable; and

said first and second test and measurement instruments ~~acquiring~~ acquire data samples of said signals under test in response to said combined trigger signal.

2. (Currently amended) The system of claim 1, wherein said transceivers comprise:

a series combination of a variable impedance device, a switch and a constant current source; wherein:

said first and second test and measurement instruments having respective transceivers in which ~~the~~ a junction of said variable impedance device and said switch is adapted to transmit ~~effect transmission of at least one of~~ said trigger ~~enabled~~ enable signal ~~and said combined trigger signal~~.

3. (Currently amended) The system of claim 2, wherein said first and second test and measurement instruments have respective transceivers in which ~~the junction~~ an output terminal of said variable impedance device ~~and said switch~~ is monitored to ~~effect reception of~~ receive ~~at least one of said trigger enabled signal and~~ said combined trigger signal.

4. (Currently amended) A system, comprising:

a plurality of signal acquisition devices, each of said signal acquisition devices comprising an event decoder, for monitoring at least one respective input signal to determine whether a logical triggering event has occurred, and a transceiver, for transmitting an indicium of the occurrence of said logical triggering event and for receiving a trigger signal; and

a trigger controller, comprising a plurality of transceivers operative to receive said logical triggering event ~~indicia~~ indicium from each of said plurality of said signal acquisition devices, transmit said trigger signal, and a logical processing device for combining said logical triggering event indicia to produce therefrom said trigger signal.

5. (Currently amended) The system of claim 4, wherein said transceivers comprise:

a series combination of a variable impedance device, a switch and a constant energy source; wherein

~~the~~ a junction of said variable impedance device and said switch is adapted to ~~effect transmission of~~ transmit said indicium of the occurrence of said logical event.

6. (Currently amended) The system of claim 5, wherein:

~~the junction~~ an output terminal of said variable impedance device ~~and said switch~~ is monitored to ~~effect reception of~~ receive said ~~triggering~~ trigger signal.

7. (Original) The system of claim 5, wherein:

said constant energy source comprises a constant current source; and

said variable impedance device comprises a transistor.

8. (Currently amended) Apparatus for use in a test and measurement instrument, comprising:

an event decoder, for monitoring at least one input signal to determine whether a logical triggering event has occurred, and generating a trigger enable signal in response thereto;

a terminal for receiving a conductor, said conductor coupling signals between said apparatus and an external device, said conductor conveying said trigger enable signal and a trigger signal in mutually opposite directions; and

a transceiver, coupled to said terminal, for transmitting ~~indicium of the occurrence of said logical triggering event~~ said trigger enable signal and for receiving said trigger signal.

9. (Currently amended) The apparatus of claim 8, wherein said test and measurement instrument futher ~~comprising~~ comprises an acquisition unit, for acquiring a plurality of said data samples from at least one input signal in response to said trigger signal.

10. (Currently amended) The apparatus of claim 8, wherein said transceiver comprises:

a series combination of a variable impedance device, a switch and a constant ~~energy~~ current source; wherein

~~the~~ a junction of said variable impedance device and said switch is adapted to ~~effect transmission of said indicium of the occurrence of said logical event~~ transmit said trigger enable signal.

11. (Currently amended) The apparatus of claim 10, wherein:

~~the junction~~ an output terminal of said variable impedance device ~~and said switch~~ is monitored to ~~effect reception of~~ receive said ~~triggering~~ trigger signal.

12. (Currently amended) The apparatus of claim 10, wherein:

~~said constant energy source comprises a constant current source; and~~

said variable impedance device comprises a transistor.

13. (Currently amended) The apparatus of claim 8, wherein:

said apparatus is used in each of a plurality of ~~signal acquisition devices~~ test and measurement instruments, each of said plurality of of ~~signal acquisition devices~~ test and measurement instruments using its respective transceiver to ~~transmitting~~ transmit a respective ~~indicia of logical triggering events~~ trigger enable signal and to receive said trigger signal.

14. (Currently amended) The apparatus of claim 13, wherein:

said external device is a trigger controller; and

each transceiver of each of ~~signal acquisition devices~~ said test and measurement instruments ~~transceiver~~ communicates with a corresponding transceiver in ~~a~~ said trigger controller, said trigger controller logically combining said ~~indicia of logical triggering events~~ respective trigger enable signals to produce said trigger signal.